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14. ABSTRACT HFM-205 addressed progress for advancing the science and practice in the challenging arena of mental health and well-being across the military spectrum. New contributions were presented in the areas of the incidence of mental health problems related to deployments (Post Traumatic Stress Disorders, Traumatic Brain Injuries, suicides, substance abuse...) and their prevention and treatment. A fair deal of attention was devoted to the barriers that prevent soldiers in need of help to seek help and stay in therapy. A number of promising emerging technologies were also introduced. The comparison about best practices and mental health problems prevalence between different NATO nations raised new important research questions that should be addressed by the HFM program of work in a near future					
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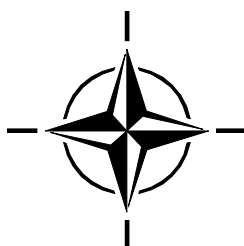
RTO MEETING PROCEEDINGS

MP-HFM-205

Mental Health and Well-Being across the Military Spectrum

(Bien-être et santé mentale dans le milieu militaire)

Papers presented at the RTO Human Factors and Medicine Panel (HFM)
Symposium held in Bergen, Norway on 11 – 13 April 2011.



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The Research and Technology Organisation (RTO) of NATO

RTO is the single focus in NATO for Defence Research and Technology activities. Its mission is to conduct and promote co-operative research and information exchange. The objective is to support the development and effective use of national defence research and technology and to meet the military needs of the Alliance, to maintain a technological lead, and to provide advice to NATO and national decision makers. The RTO performs its mission with the support of an extensive network of national experts. It also ensures effective co-ordination with other NATO bodies involved in R&T activities.

RTO reports both to the Military Committee of NATO and to the Conference of National Armament Directors. It comprises a Research and Technology Board (RTB) as the highest level of national representation and the Research and Technology Agency (RTA), a dedicated staff with its headquarters in Neuilly, near Paris, France. In order to facilitate contacts with the military users and other NATO activities, a small part of the RTA staff is located in NATO Headquarters in Brussels. The Brussels staff also co-ordinates RTO's co-operation with nations in Middle and Eastern Europe, to which RTO attaches particular importance especially as working together in the field of research is one of the more promising areas of co-operation.

The total spectrum of R&T activities is covered by the following 7 bodies:

- AVT Applied Vehicle Technology Panel
- HFM Human Factors and Medicine Panel
- IST Information Systems Technology Panel
- NMSG NATO Modelling and Simulation Group
- SAS System Analysis and Studies Panel
- SCI Systems Concepts and Integration Panel
- SET Sensors and Electronics Technology Panel

These bodies are made up of national representatives as well as generally recognised 'world class' scientists. They also provide a communication link to military users and other NATO bodies. RTO's scientific and technological work is carried out by Technical Teams, created for specific activities and with a specific duration. Such Technical Teams can organise workshops, symposia, field trials, lecture series and training courses. An important function of these Technical Teams is to ensure the continuity of the expert networks.

RTO builds upon earlier co-operation in defence research and technology as set-up under the Advisory Group for Aerospace Research and Development (AGARD) and the Defence Research Group (DRG). AGARD and the DRG share common roots in that they were both established at the initiative of Dr Theodore von Kármán, a leading aerospace scientist, who early on recognised the importance of scientific support for the Allied Armed Forces. RTO is capitalising on these common roots in order to provide the Alliance and the NATO nations with a strong scientific and technological basis that will guarantee a solid base for the future.

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Mental Health and Well-Being Across the Military Spectrum

(RTO-MP-HFM-205)

Executive Summary

The operational deployments NATO Forces are conducting often present very high levels of stress for the soldiers. Large numbers of them (up to 15% within the U.S. Infantry) develop mental health problems afterwards. These include Post Traumatic Stress Disorder (PTSD), a wide range of co-morbidity (e.g. alcohol-misuse, violence, dangerous driving) and a much increased risk for suicide.

To address these problems that engender much suffering for the veterans and their families and draw significant resources to provide them with adequate care, the Human Factors and Medicine Panel (HFM) of NATO's Research and Technology Organisation (RTO) has initiated a successful series of Technical Activities on advancing the science, the options for applications and the state-of-practice in the challenging area of mental health (e.g. HFM-081, 103, 159, 171, 175, 178, 179, 193, 203). The HFM-205 Symposium provided a timely and successful venue to set a framework for future HFM work on Mental Health and Well-Being within the Military.

The Symposium's Program Committee selected 4 keynotes and 41 papers that covered a wide range of topics pertinent to the Symposium's theme. Most of them dealt with mental health problems and their treatment and mental health training. There were few papers specifically addressing well-being.

The mental health problems issue clearly has two faces: prevention and treatment. In the course of the Symposium, evidence emerged that the relationship between exposure to one or more traumatic events and the development of PTSD isn't a simple stimulus-response reaction. Many parameters (e.g. personality, leadership quality, unit-cohesion, duration of deployment versus expected duration) intervene in the process of developing PTSD and its co-morbidity or not. These parameters offer the opportunity for further preventive action. Mental health training is a very important tool for prevention indeed but additional actions to create a Military-wide favorable environment are urgently needed.

In the domain of problem treatment, it was noticed that while help is available, many veterans in need don't seek help or drop out of therapy early. Among the reasons for not seeking help, stigma (i.e. the fear of negative consequences of admitting having a problem such as rejection by peers or jeopardized career prospects) and negative perceptions (e.g. "I don't trust mental health professionals") are seen as the most prominent barriers. Changing attitudes is key to increase the probability that veterans in need seek help. Implementing the desirable attitude change within a traditionally tough (macho) military culture is a real challenge and specific research to support this endeavor is recommended.

Some emerging technologies were presented: these include virtual reality training, neurofeedback and telerehabilitation. The technologies look promising but currently lack sufficient empirical and pertinent evidence. It is recommended that well-designed research be conducted to demonstrate the usability of these technologies in real world settings.

Bien-être et santé mentale dans le milieu militaire

(RTO-MP-HFM-205)

Synthèse

Les déploiements opérationnels que conduisent les forces de l'OTAN induisent souvent des niveaux très importants de stress pour les combattants. Grand nombre d'entre eux (jusqu'à 15% dans l'infanterie US) développent a posteriori des problèmes de santé mentale. Ceux-ci incluent des troubles de stress post-traumatique (PTSD), un large éventail de morbidités associées (par exemple l'abus d'alcool, la violence, la conduite dangereuse) et un risque accru de suicide.

Afin de traiter ces problèmes qui engendrent de grandes souffrances pour les vétérans et leurs familles, et qui drainent des ressources importantes pour leur dispenser des soins adaptés, la commission pour la Médecine et les Facteurs Humains (HFM) de l'Organisation pour la Recherche et la Technologie de l'OTAN (RTO) a initié avec succès une série d'activités techniques destinées à faire progresser la science, les choix d'applications et l'état de l'art dans le domaine motivant de la santé mentale (voir HFM-081, 103, 159, 171, 175, 178, 179, 193, 203). Le symposium HFM-205 a fourni une occasion opportune et couronnée de succès de fixer un cadre pour les futurs travaux HFM sur la santé mentale et le bien-être chez les militaires.

Le comité de programme du symposium avait sélectionné 4 points clés et 41 documents qui couvraient un large éventail de sujets en adéquation avec le thème retenu. La plupart d'entre eux traitait des problèmes de santé mentale, de leur traitement et de la formation à la santé mentale. Il n'y avait que peu de documents s'intéressant spécifiquement au bien-être.

La question des problèmes de santé mentale comporte à l'évidence deux aspects : la prévention et le traitement. Au cours du symposium, il est apparu évident que la relation entre l'exposition à un ou plusieurs événements traumatisants, et le développement de PTSD n'est pas une simple réaction du type stimulation-réponse. De nombreux paramètres (par exemple la personnalité, les qualités de commandement, la cohésion de l'Unité, la durée réelle du déploiement comparée à la durée attendue) interviennent dans le processus de développement ou non du PTSD et de la morbidité associée. Ces paramètres offrent la possibilité de mener une action préventive. La formation à la santé mentale est bien entendu un outil très important de prévention mais il faut de toute urgence mener des actions complémentaires pour créer un environnement favorable pour l'ensemble des militaires.

Dans le domaine du traitement des problèmes, on a noté que, bien qu'une aide soit disponible, de nombreux vétérans dans le besoin ne recherchent pas cette aide, ou abandonnent rapidement les thérapies. Parmi les raisons invoquées pour ne pas rechercher d'aide, la stigmatisation (La crainte que le fait de reconnaître que l'on a un problème ait des conséquences négatives, comme le rejet par ses pairs ou la mise en péril de projets de carrière) et les opinions négatives (par exemple « je n'ai aucune confiance dans les professionnels de la santé mentale ») sont considérées comme les obstacles les plus importants. Un changement des comportements est essentiel pour augmenter les chances de voir les vétérans dans le besoin rechercher de l'aide. Réaliser ce changement souhaitable de comportement dans un environnement militaire de culture traditionnellement rude (macho) est un vrai défi, et il est recommandé de conduire une recherche spécifique pour soutenir ce projet.

Quelques technologies émergentes ont été présentées, parmi lesquelles la formation à la réalité virtuelle, le retour d'expérience neurologique et la télé-réhabilitation. Ces technologies semblent prometteuses, mais n'ont pas suffisamment fait leurs preuves de façon empirique et pertinente. Il est recommandé de conduire des recherches bien définies, afin de démontrer l'utilité de ces technologies dans un cadre réel.